JOURNAL OF
Inorganic Biochemistry

Volume 62, Number 1, April, 1996

Contents

STEVEN C. WALLIS, LAWRENCE R. GAHAN, BRUCE G. CHARLES (Brisbane, Australia), TREVOR W. HAMBLEY (Sydney, Australia), and PAUL A. DUCKWORTH (Brisbane, Australia)
Copper(II) Complexes of the Fluoroquinolone Antimicrobial Ciprofloxacin. Synthesis, X-Ray Structural Characterization, and Potentiometric Study **1**

PREDRAG DJURDJEVIC (Kragujevac, Yugoslavia) and DIVNA DJOKIC (Belgrade, Yugoslavia)
Protein Interactions with Bivalent Tin. 1. Hydrolysis and Complexation of Tin(II) Ion with Glycine **17**

S. L. SUMALAN, J. CASANOVA, G. ALZUET, J. BORRÁS (Valencia, Spain), A. CASTIÑEIRAS (Santiago, Spain), and C. T. SUPURAN (Bucharest, Roumania)
Synthesis and Characterization of Metal(II)-8-quinolinsulfonamidato (sa^-) Complexes (M=Co, Ni, Cu, and Zn). Crystal Structure of $[Zn(sa)_2(NH_3)].NH_3$ Complex. Carbonic Anhydrase Inhibitory Properties **31**

JOSÉ S. CASAS, MARÍA S. GARCÍA-TASENDE (Galicia, Spain), C. MAICHLE-MÖSSMER (Tübingen, Germany), MARÍA C. RODRÍGUEZ-ARGÜELLES, AGUSTÍN SÁNCHEZ, JOSÉ SORDO, ANTONIA VÁZQUEZ-LÓPEZ (Galicia, Spain), SILVANA PINELLI, PAOLO LUNGHI, and ROBERTO ALBERTINI (Parma, Italy)
Synthesis, Structure, and Spectroscopic Properties of Acetato(dimethyl) (pyridine-2-carbaldehydethiosemicarbazonato)tin(IV) Acetic Acid Solvate, $[SnMe_2(PyTSC)\ OAc)].HOAc$. Comparison of Its Biological Activity with that of Some Structurally Related Diorganotin(IV) bis(thiosemicarbazonates) **41**

ALVARO BERNALTE GARCÍA, JOSÉ CARLOS CAMESELLE, FERNANDO J. GARCÍA BARROS, FRANCISCO J. HIGES ROLANDO, CRISTÓBAL VALENZUELA CALAHORRO (Badajoz, Spain), and JUAN CRISTÓBAL VALENZUELA CLAROS (Sevilla, Spain)
Interaction of Divalent Metal Ions with Fructose 2,6-Bisphosphate and Analogs **57**

DEVENDRA SINGH (New Delhi, India), R. V. SINGH (Jaipur, India), and N. K. JHA (New Delhi, India)
Triorganosilicon (IV) Compounds: Synthesis, Structural Study, and Biological Activity **67**

ERRATUM **75**

Volume 62, Number 2, May 1, 1996

Contents

MARIA CHIARA SILVESTRINI, FRANCESCA CUTRUZZOLÀ, MARIA EUGENIA SCHININÀ, BRUNO MARAS, GABRIELLA ROLLI, and MAURIZIO BRUNORI (Rome, Italy)
Isolation and Characterization of the d_1 Domain of *Pseudomonas aeruginosa* Nitrite Reductase **77**

STEPHAN SIX, MARTIN TRAGESER (Mainz, Germany), ELZBIETA KOJRO, FALK FAHRENHOLZ (Frankfurt, Germany), and GOTTFRIED UNDEN (Mainz, Germany)
Reactivity of the *N*-Terminal Cysteine Residues in Active and Inactive Forms of FNR, An O_2-Responsive, Fe Containing Transcriptional Regulator of *Escherichia coli* **89**

LECHOSLAW LOMOZIK and ANNA GASOWSKA (Poznan, Poland)
Investigations of Binding Sites and Stability of Complexes Formed in Ternary Cu(II)/Adenosine or Cytidine/Putrescine Systems **103**

NENAD JURANIĆ, STANIMIR VUK-PAVLOVIĆ, ALEKSANDAR T. NIKOLIĆ, TONG-BIN CHEN, and SLOBODAN MACURA (Rochester, Minnesota)
Nitrogen-15 NMR Chemical Shifts in Oligopeptides Coordinated to Cobalt(III) **117**

MARK M. JONES (Nashville, Tennessee), JOHN JOSEF MOLENDA (New York, New York), TIMOTHY P. HANUSA, and MARKUS W. VOEHLER (Nashville, Tennessee)
Structure of 5-Hydroxy-2-hydroxymethyl-1-methylpyrid-4-one and ^{13}C NMR Relaxation Studies of its Gadolinium(III) Complex **127**

PIN YANG (Nanjing, P. R. China), HONGFEI WANG, FEI GAO, and BINGSHENG YANG (Taiyuan, P. R. China)
Antitumor Activity of the Cu(II)-Mitoxantrone Complex and Its Interaction with Deoxyribonucleic Acid **137**

EUGÉNIA CARVALHO, ROLAND AASA, and PER-OLOF GÖTHE (Göteborg, Sweden)
Electron Paramagnetic Resonance Studies of Cobalt-Substituted Angiotensin I-Converting Enzyme **147**

Volume 62, Number 3, May 15, 1996

Contents

JOSEPH J. STEPHANOS (Philadelphia, Pennsylvania)
Drug-Protein Interactions: Two-Site Binding of Heterocyclic Ligands to a Monomeric Hemoglobin **155**

SUSAN E. KIDD, TREVOR W. HAMBLEY (New South Wales, Australia), ANIKÓ HEVÉR (Szeged, Hungary), MAREE J. NELSON (New South Wales, Australia), and JOSEPH MOLNÁR (Szeged, Hungary)
The Antiplasmid Action of Some Palladium(II) Complexes of Phenothiazine Based Pharmaceuticals and the Crystal Structure of Protonated Trichloro[10-(3′-dimethylaminopropyl) phenothiazine-*S*]-palladium(II) **171**

P. C. H. MITCHELL (Reading, United Kingdom), S. F. PARKER (Oxon, United Kingdom), K. SIMKISS, JANE SIMMONS, and MARINA G. TAYLOR (Reading, United Kingdom)
Hydrated Sites in Biogenic Amorphous Calcium Phosphates: An Infrared, Raman, and Inelastic Neutron Scattering Study **183**

CHRISTIAN SIEVERS, DIRK DETERS, HANS-JÜRGEN HARTMANN, and ULRICH WESER (Tübingen, Germany)
Stable Thiyl Radicals in Dried Yeast Cu(I)$_6$-Thionein **199**

CLAUDIU T. SUPURAN (Firenze, Italy), SPYROS V. SERVES, and PANAYIOTIS V. IOANNOU (Patras, Greece),
Carbonic Anhydrase Inhibitors—Part 33.[1] Isozyme II Inhibition with 2,3-Dihydroxypropylarsonic Acids and Arsonolipids **207**

FRANCA VIOLA, SILVIO AIME (Turin, Italy), MASSIMO COLETTA (Camerino, Italy), ALESSANDRO DESIDERI (Messina, Italy), MAURO FASANO, SILVIA PAOLETTI (Turin, Italy) CATALDO TARRICONE (Pavia, Italy), and PAOLO ASCENZI (Turin, Italy)
Azide, Cyanide, Fluoride, Imidazole and Pyridine Binding to Ferric and Ferrous Native Horse Heart Cytochrome *c* and to Its Carboxymethylated Derivative: A Comparative Study **213**

MARIO BRANCA, MICHELINA FRUIANU, SALVATORE SAU, and MARIA ANTONIETTA ZORODDU (Sassari, Italy)
EPR and ENDOR Studies on Monoanionic Complexes of 1,2-Semiquinones with ^{52}Cr, ^{53}Cr(III) **223**

Volume 62, Number 4, June, 1996

Contents

DONALD OBERLEAS (Lubbock, Texas)
Mechanism of Zinc Homeostasis **231**

SHENG YUE, WEIQING ZHONG, BAOLIN ZHANG, LINGYAN ZHU, and WENXIA TANG (Nanjing, People's Republic of China)
Reaction of Metallothionein with Ethylenediamine-*N*,*N*,*N*′,*N*′-Tetraacetic Acid **243**

JILLIAN A. SAPONJA and HANS J. VOGEL (Calgary, Canada)
Metal-Ion Binding Properties of the Transferrins: A Vanadium-51 NMR Study **253**

MADHU SUDAN MONDAL and SAMARESH MITRA (Bombay, India)
The Inhibition of Bovine Xanthine Oxidase Activity by Hg^{2+} and Other Metal Ions **271**

REINHOLD KÖCKERBAUER and PATRICK J. BEDNARSKI (Regensburg, Germany)
Unusual Reactivity of Cisplatin Analogs That Bear *o*-Phenylenediamine Ligands: Insights for the Design of More Effective Cytotoxic Agents **281**

Author Index **299**

Subject Index **301**